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10/519,841	01/12/2005	Frank Dietsche	263524US0PCT	7205
22850	7590	06/18/2007	EXAMINER	
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C.			KRUER, KEVIN R	
1940 DUKE STREET			ART UNIT	PAPER NUMBER
ALEXANDRIA, VA 22314			1773	
			NOTIFICATION DATE	DELIVERY MODE
			06/18/2007	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No. 10/519,841	Applicant(s) DIETSCHKE ET AL.	
	Examiner Kevin R. Kruer	Art Unit 1773	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 March 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 and 16-25 is/are pending in the application.
- 4a) Of the above claim(s) 25 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 and 16-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

Newly submitted claim 25 directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: the product of claims 1-24 could be made by a materially different process. For example, the product of claim 1 could be made using a method wherein the intercoat (D) has a Tg of between -20 and -60C. Alternatively, the product could be made by making the multi-coat system and then applying said multi-coat system to the substrate (A).

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claim 25 withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-9 and 16-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mack et al (US 6,500,883) in view of (a) Otaki et al (US 6,482,489) and (b) Downey (US 3,880,953) or Korpman (US 4,136,071)

Mack teaches a filled polyamide composition comprising fillers surface modified by treatment with an organosilane and /or organosiloxane coating agent (abstract).

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Said composition has a impact strength as claimed (see example 5, column 8) and is used to product goods such as electronic devices and parts for motor vehicles (col 6, lines 25+). When used in such embodiments, said layer is attached to another layer (herein understood to read on the substrate of claim 8).

Mack does not teach the claimed multi-coat system. However, Otaki teaches a hologram laminated that reads on the claimed multi-coat system. Said hologram can be applied to high priced goods (Background of the invention) such as those made with the composition of Mack. Specifically, the hologram comprises a 1-50um thick UV curable urethane acrylate hard coat (col 5, lines 25+) and a styrene block elastomer adhesive having a thickness of 4-20um(col 52, lines 53+). Intervening the adhesive and the hardcoat may be a substrate. Said substrate is understood to read on the claimed layers of claim 2. Thus, it would have been obvious to the skilled artisan to apply the hologram to the substrate taught in Mack in order to provide an authenticating mark on said substrate.

Mack does not teach the adhesive should have the claimed Tg. However, Downey and Korpman each teach pressure sensitive adhesives comprising styrene block copolymers meeting the claimed limitations. Specifically, Downey teaches a block copolymer comprising 10-50wt% styrene (col 1, lines 45+) and Korpman teaches a block comprising 10-35wt% styrene (col 1, lines 35+). Said composition read on the Tg limitation of claim 1 when the diene is isoprene or butadiene and on the limitation of claim 21 when the diene is butadiene. Thus, it would have been obvious to utilize either

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of the PSAs as the styrene block copolymer PSA taught in Mack because said PSA are taught to exhibit excellent adhesive properties.

3. Claims 1-9 and 16-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Onozawa et al (US 6,103,37) in view of (a) JP0518671 (Matsuoka) and (b) Downey (US 3,880,953) or Korpman (US 4,136,071)

Onozawa teaches a hardcoat sheet comprising a base sheet, and a coat layer which is provided on the based sheet and formed form a radiation curable urethane acrylate (abstract and col 2, lines 24+). Said layer has a thickness of 1-10um (col 3, lines 60+). The hardcoat is applied to the base sheet and an adhesive comprising styrene butadiene block copolymers having a thickness of 10-50um (col 4) is utilized to apply the laminate to a window pane (col 3, lines 63+). In use, the window pane is then attached to another layer (herein understood to read on the substrate of claim 8).

Onozawa does not teach the window pane should comprise a polymer with the claimed impact strength. However, Matsuoka teaches a window pane made of polycarbonate having a impact strength of 60kg/cm/cm or more. The examiner takes the position that said impact strength is taught with sufficient specificity to read on the claimed limitation. Thus, it would have been obvious to the skilled artisan to utilize the window pane taught in Matsuoka as the window pane taught in Onozawa because said window pane has excellent impact resistance.

Onozawa does not teach the adhesive should have the claimed Tg. However, Downey and Korpman each teach pressure sensitive adhesives comprising styrene block copolymers meeting the claimed limitations. Specifically, Downey teaches a block

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copolymer comprising 10-50wt% styrene (col 1, lines 45+) and Korpman teaches a block comprising 10-35wt% styrene (col 1, lines 35+). Said composition read on the T_g limitation of claim 1 when the diene is isoprene or butadiene and on the limitation of claim 21 when the diene is butadiene. Thus, it would have been obvious to utilize either of the PSAs as the styrene block copolymer PSA taught in Onozawa because said PSA are taught to exhibit excellent adhesive properties.

4. Claims 1-7, 9, 17-19, and 21-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bergh et al (2003/0104245) in view of Van Havenbergh et al (US 5,334,842).

Bergh teaches a radiation image storage panel comprising a self-support layer, a phosphor particle containing layer a urethane acrylate radiation curable protective layer (abstract). Said layer has a thickness of 1-20um (0042). The binder for the phosphor layer may comprise Kraton, which is herein understood to read on the claimed elastomeric intercoat layer (0041). Said layer has a thickness of 10-1000um (0041). An additional layer may be present between said phosphor layer and urethane acrylate protective layer (0036).

Bergh does not teach that the substrate should comprise a polymer with the claimed impact strength. However, Van Havenbergh teaches the substrate of such panels should have high strength (col 17, lines 35+) and may comprise polyethylenes such as LUMIRROR) metal polyamide, polyimide and the like. Thus, it would have been obvious to utilize polyamide and polyimides, and metals with high impact strength

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as the substrate taught in Bergh because Van Havenbergh teaches such substrate are desirable in radiation storage panels.

Response to Arguments

Applicant's arguments filed March 12, 2007 have been fully considered but are not persuasive.

With respect to Mack, Applicant argues that the reference is completely irrelevant to the present invention because the filed of technology is unrelated. Specifically, Mack is drawn to a polyamide composition used to fabricate articles whereat the claimed invention is drawn to a multi-coat system. Said argument is not persuasive because Mack was never relied upon to teach the claimed multi-coat system. Rather, Otaki was relied upon to teach a multi-coat system that could be applied to the substrate of Mack in such a manner to read on the claimed invention. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

With respect to Otaki, Applicant argues that the reference does not pertain to the field of technology of hard coat, radiation curable coating systems but rather is concerned with the bonding of a hologram layer to a substrate. The examiner notes that the proposed combination renders obvious each and every claim limitation. Specifically, the claimed "coating system" limitation is not understood to patentably distinguish the claimed invention from the invention rendered obvious by Mack in view

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of Otaki. There is no evidence of record to suggest that "coating system" should be understood to inherently limit the method of application or the final properties of the claimed coats.

Applicant argues that Otaki comprises a pressure sensitive adhesive whereas the claimed invention does not comprise said PSA. Said argument is noted but is not persuasive because it is not commensurate in scope with the claimed invention. The claim does not contain a negative limitation excluding the presence of a PSA. Furthermore, applicant does not argue that any of the pending limitations inherently exclude the presence of a PSA layer. Said adhesive is taught to be elastic (col 52, lines 53+) and is therefore understood to read on the claimed elastic intercoat. Applicant argues the claimed elastic intercoat is made from rubber-containing polymers, polyacrylates, polyisobutylenes or thermoplastic elastomers. The examiner initially notes the PSA would read on a thermoplastic elastomer. Furthermore, it is noted that applicant's argument is not commensurate in scope with the claims. The independent claim does not limit the composition of the claimed elastic intercoat.

Applicant further argues the topcoat is applied directly to the layer formation of the laminate. Said argument is not persuasive because it is not commensurate in scope with the claimed invention. With respect to claim 25, said argument is moot since the claim has been restricted by original presentation.

With respect to Downey and Korpman, applicant argues that both references are drawn to PSAs whereas the claims invention does not employ such a composition. Said argument is noted but is not persuasive because it is not commensurate in scope

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with the claimed invention. The claim does not contain a negative limitation excluding the presence of a PSA. Furthermore, applicant does not argue that any of the pending limitations inherently exclude the presence of a PSA layer.

With respect to the rejection of claims 1-9 and 16-24 as being obvious over Onozawa in view of Matsuoka, Downey, or Korpman, Applicant argues that Onozawa fails to describe the laminated structure of the present invention in which an elastic intercoat layer is applied to the surface of a substrate and then a coat of at least one radiation curable coating system is applied over the elastic intercoat layer, with an optional pigmented coated layer intervening the coating layer and the elastic intercoat layer. Said argument is noted but is not commensurate in scope with the claims. The claimed products are not limited as described above with regards to how the multiplayer coating is made. Furthermore, there is no evidence to demonstrate that such a claimed method would inherently result in a materially different product from the prior art. Thus, the argument is not persuasive.

With regards to claim 25, said argument is moot since said claim has been restricted as being drawn to a non-elected invention.

Applicant argues Matsuoka fails to overcome the above noted deficiencies of Onozawa. Said argument is noted. However, the argument is not persuasive because the reference was never relied upon for such a teaching.

Applicant argues the references are drawn to PSAs whereas the claims invention does not employ such a composition. Said argument is noted but is not persuasive because it is not commensurate in scope with the claimed invention. The claim does

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not contain a negative limitation excluding the presence of a PSA. Furthermore, applicant does not argue that any of the pending limitations inherently exclude the presence of a PSA layer.

With respect to claims 1-7, 9, 17-19, and 21-24 as being rejected based on 35 USC 103 as obvious over Bergh, in view of VanHavenbergh, Applicant argues that the thermoplastic rubbery material of Bergh constitutes the binder component of the base self-supporting or supported layer which contains phosphor particles and is not as separate layer of the laminated structure described in the publication. Applicant concludes that the rubbery material does not therefore form the equivalent of the elastic layer of the present claims. The examiner respectfully disagrees and notes the examiner never took the position that the binder constituted 2 separate layers of the claimed laminate.

Applicant further argues the claimed radiation curable coating system does not contain phosphor particles because it does not have an image exhibiting function. Said argument is noted but is not persuasive because it is not commensurate in scope with the claimed invention. The composition of said radiation curable layer does not exclude the presence of phosphor particles. Furthermore, pigment is not excluded from the claimed radiation curable layer.

For the reasons noted above, the rejections are maintained.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin R. Kruer whose telephone number is 571-272-1510. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carol Chaney can be reached on 571-272-1284. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Kevin R. Kruer

Patent Examiner-Art Unit 1773